

FIG. 1a

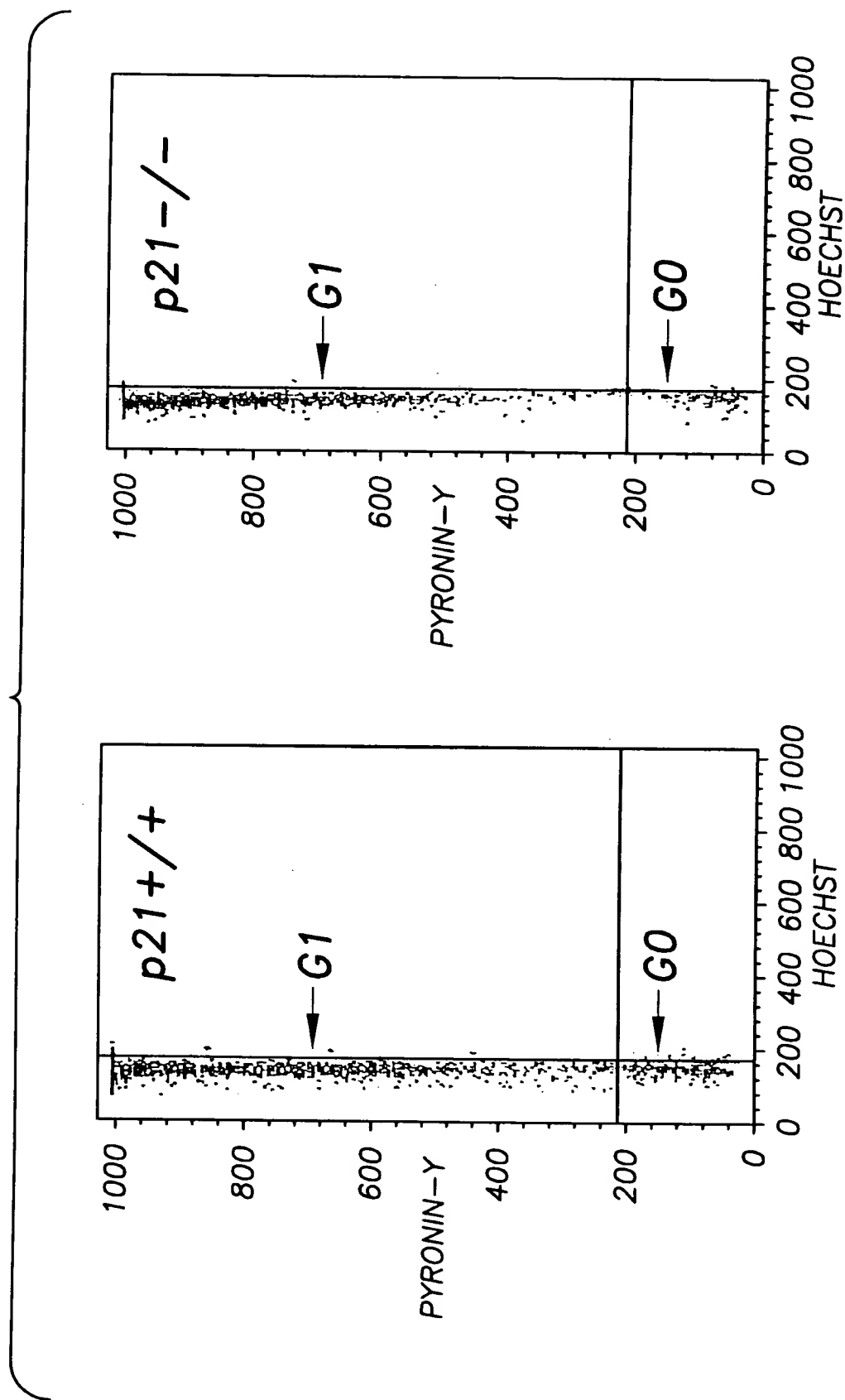
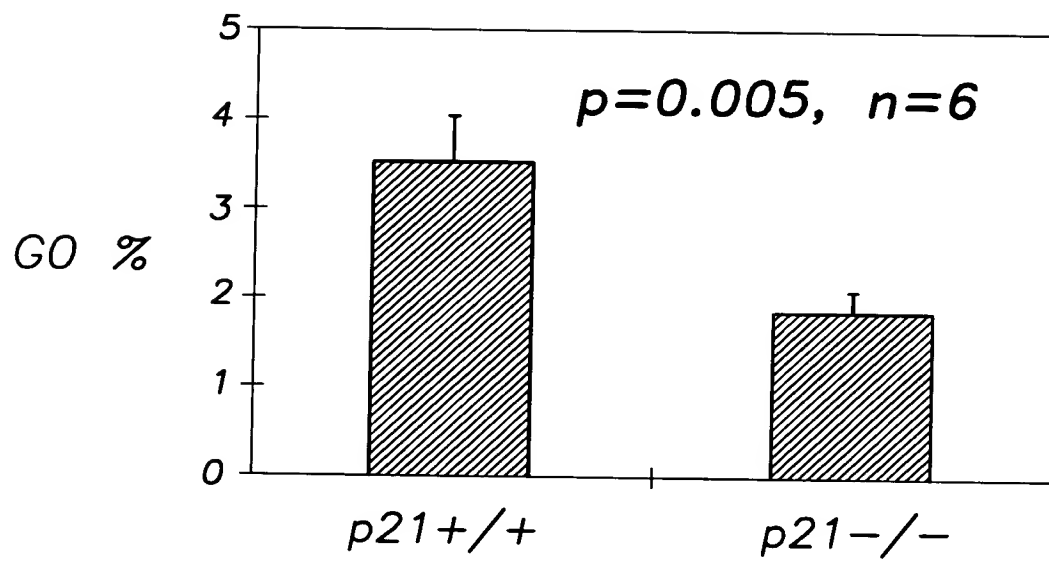


FIG. 1b



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FIG.2a

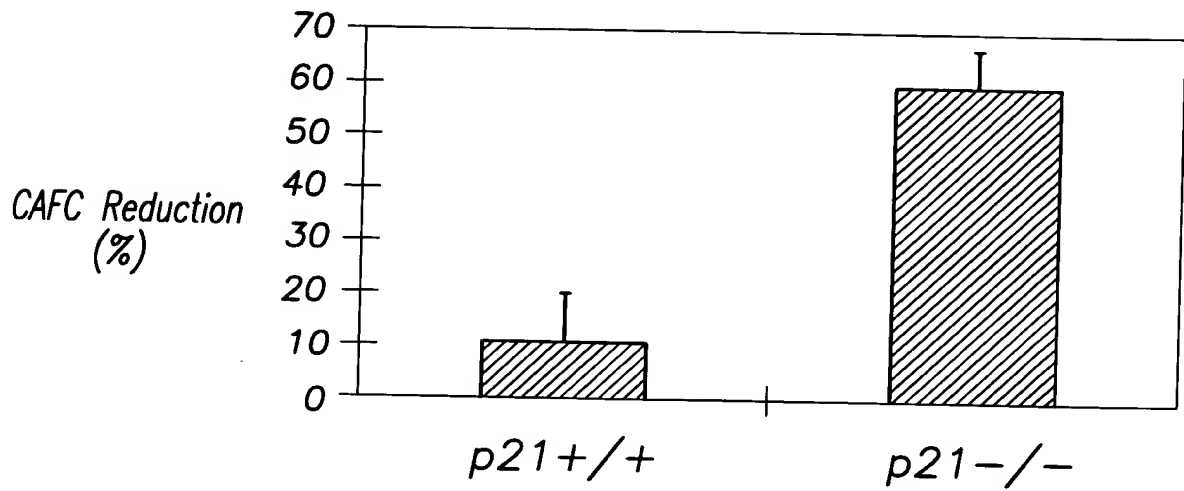


FIG.2b

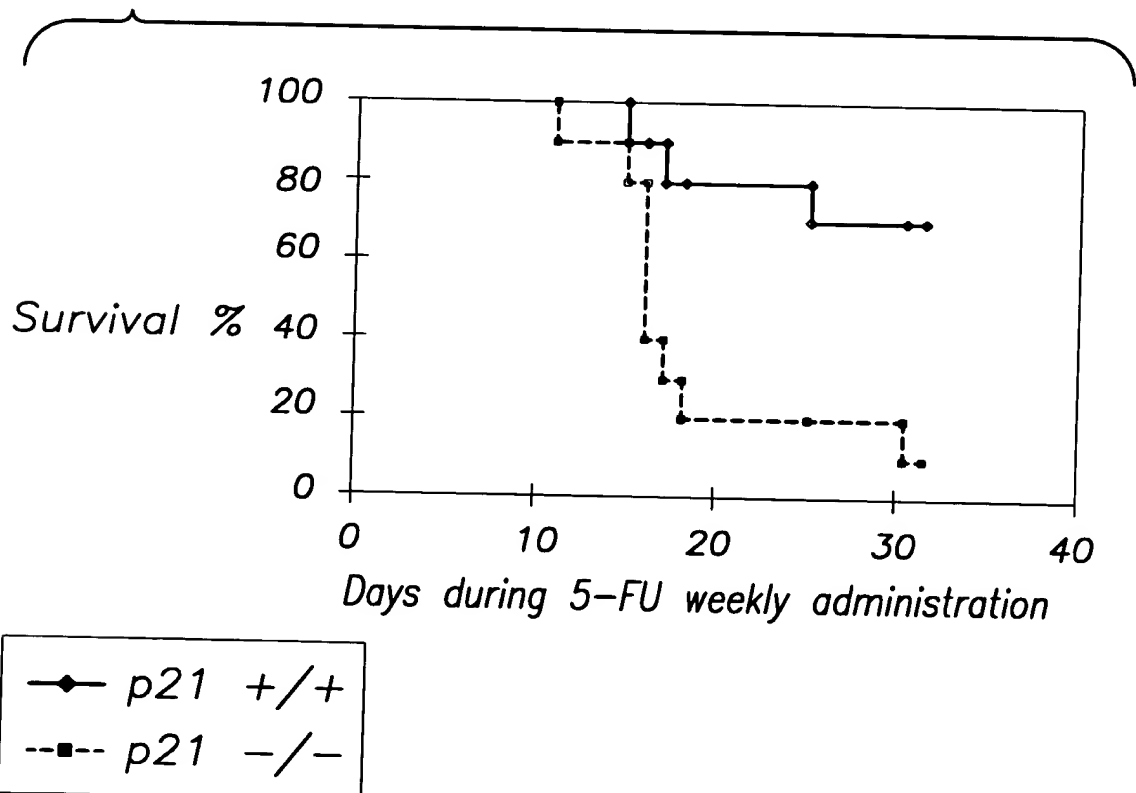


FIG.3a

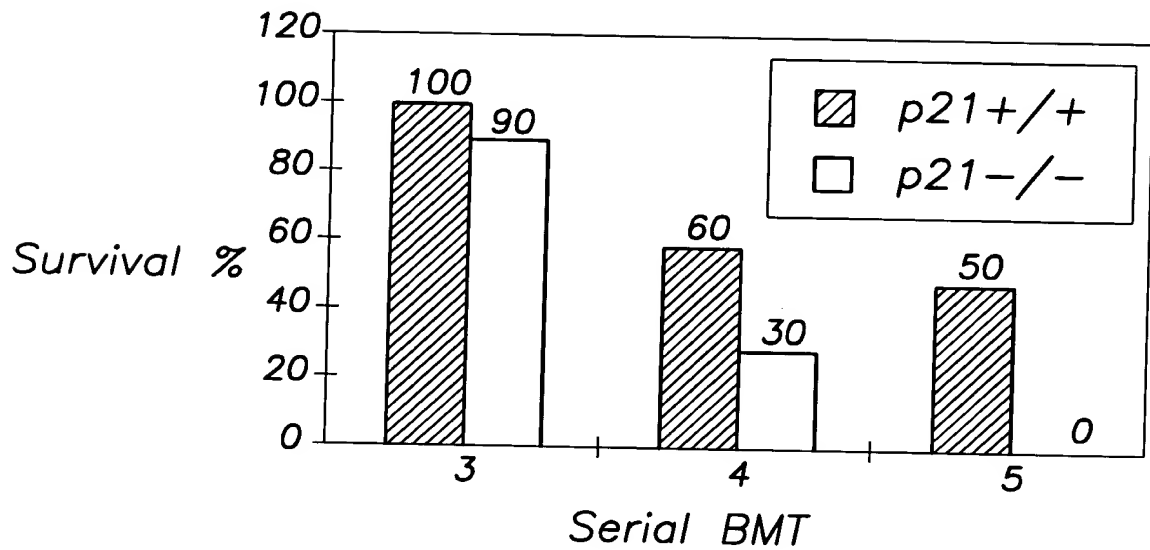


FIG.3b

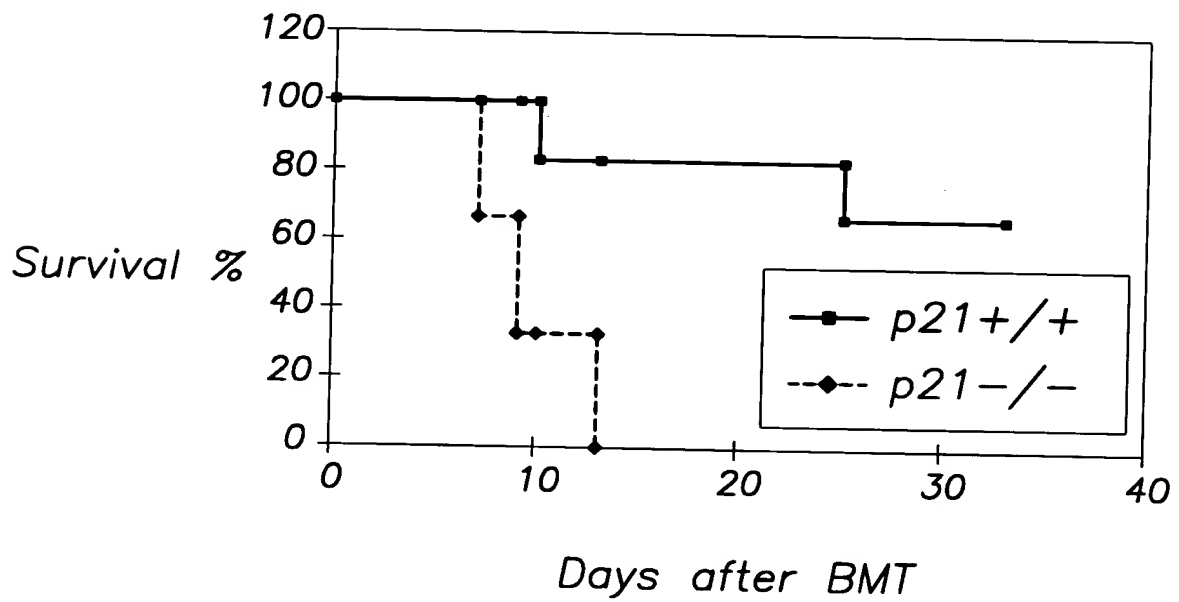


FIG. 3c

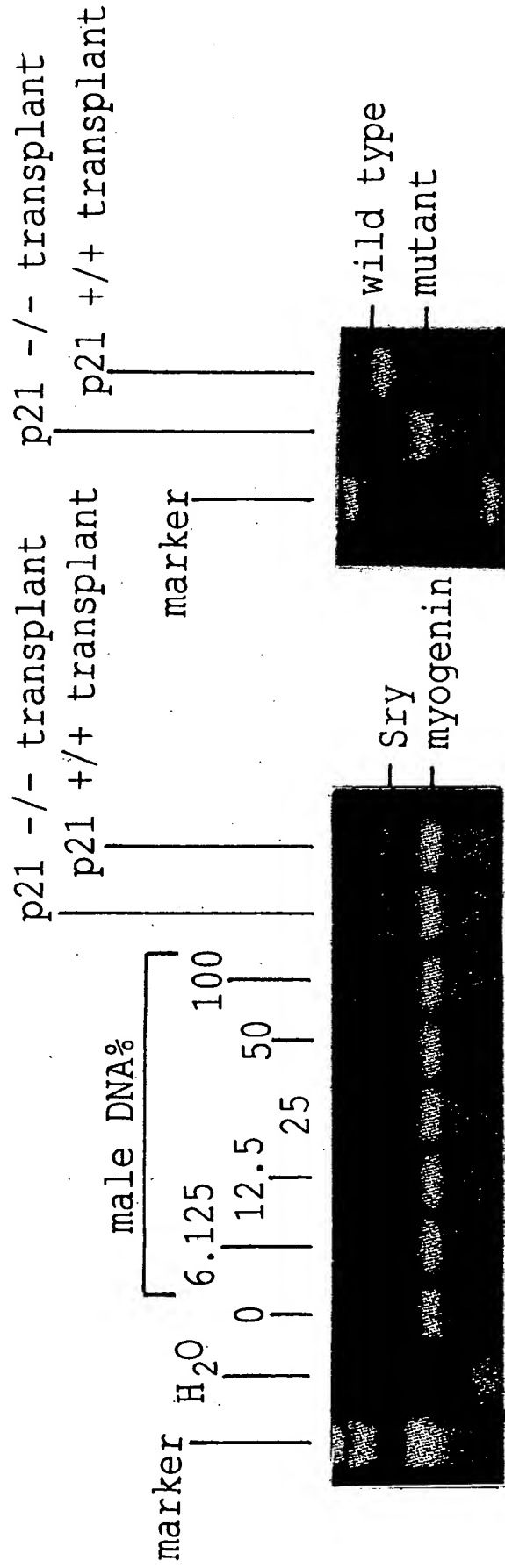


FIG. 4



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FIG.5a

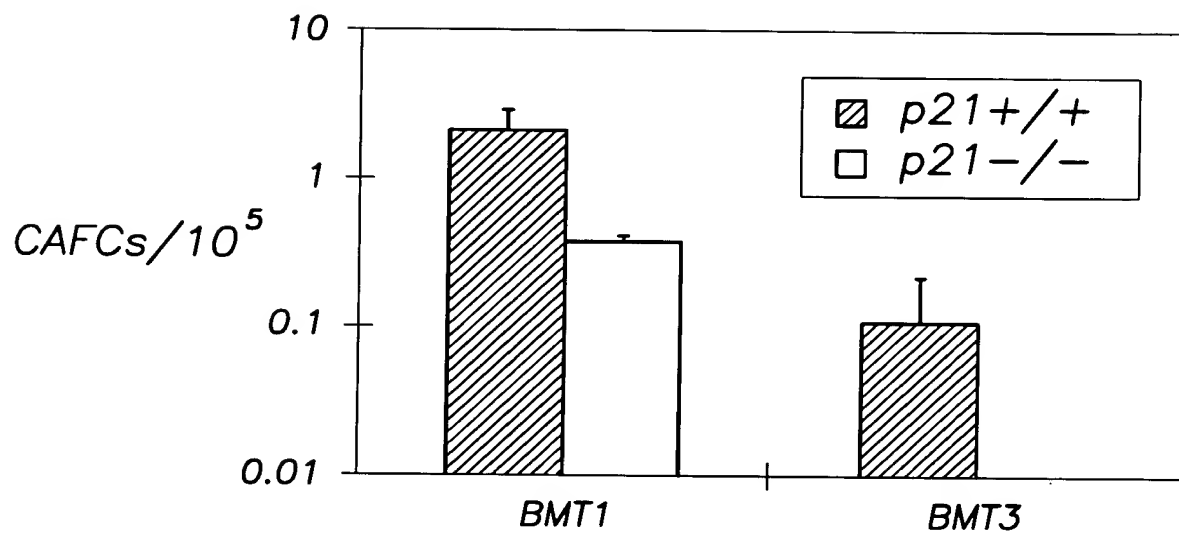


FIG.5b

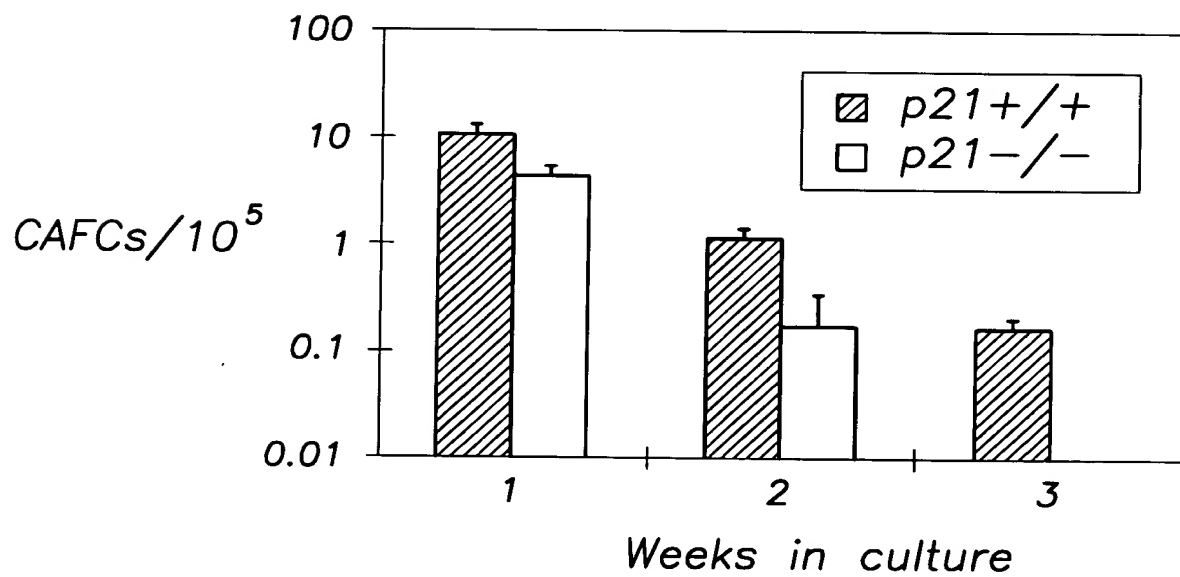


FIG. 6a

FIG. 6a

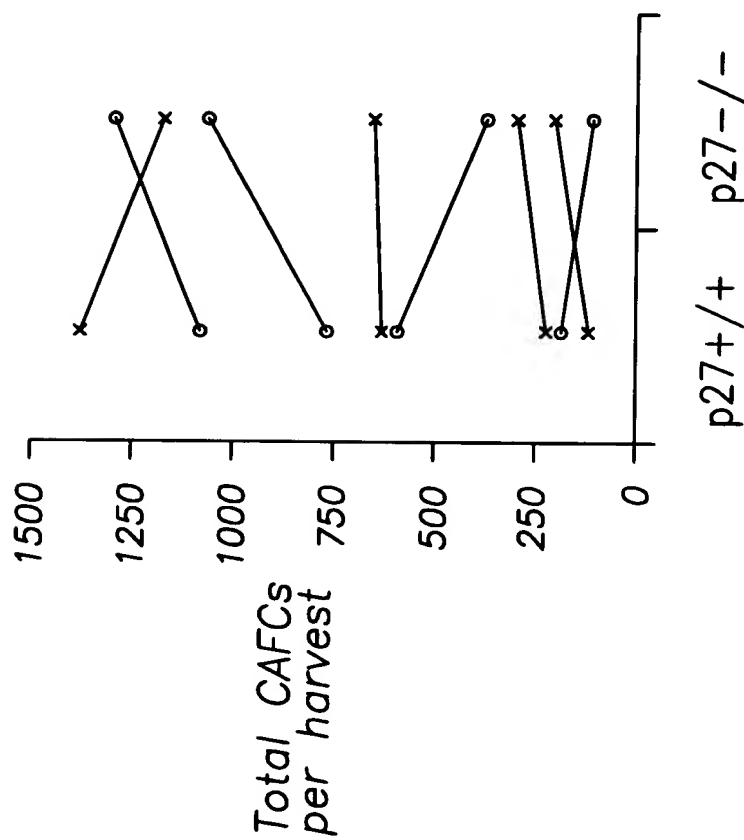
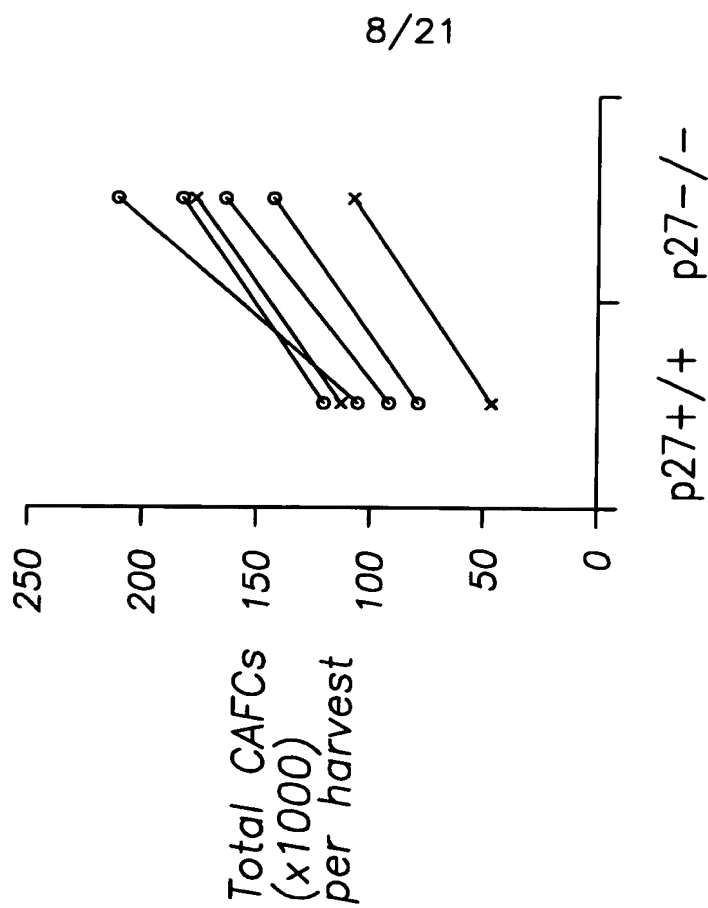
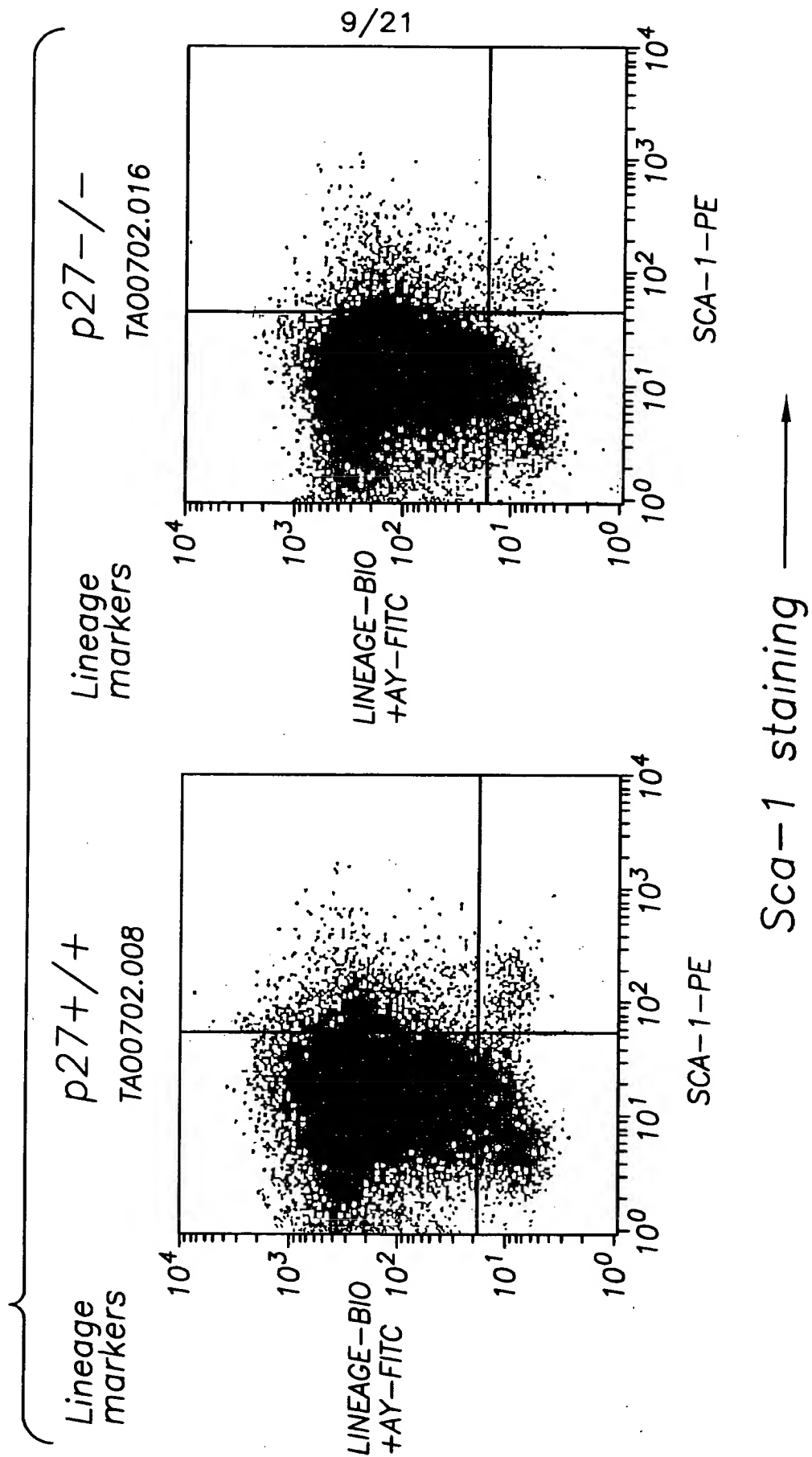


FIG. 6b



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FIG. 7a-1

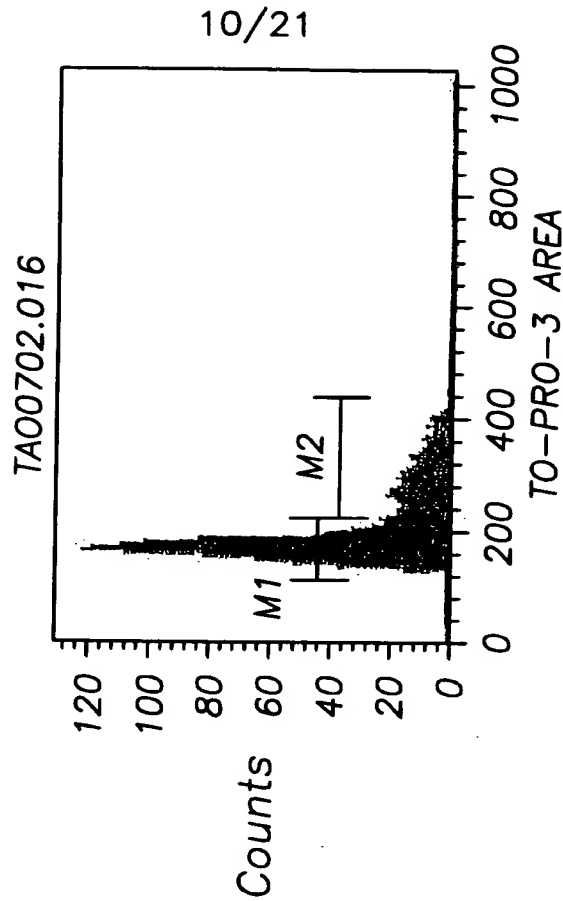
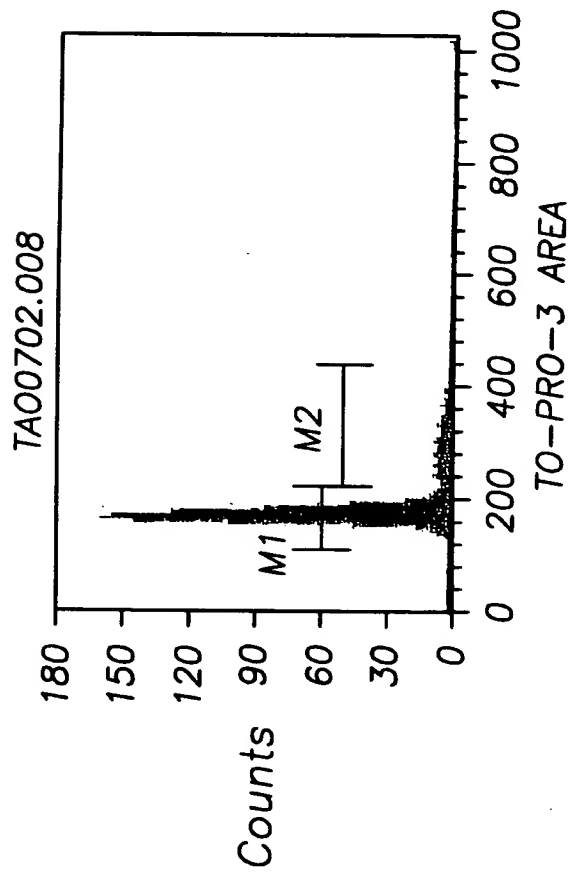


TOP SECRET

FIG. 7a-2

Sca-1+Lin+

Sca-1+Lin+



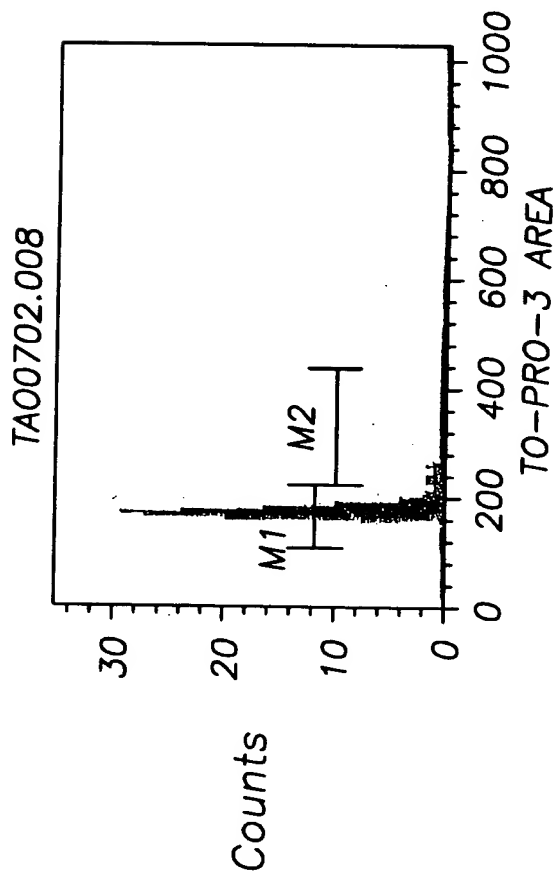
To-pro-3 staining →

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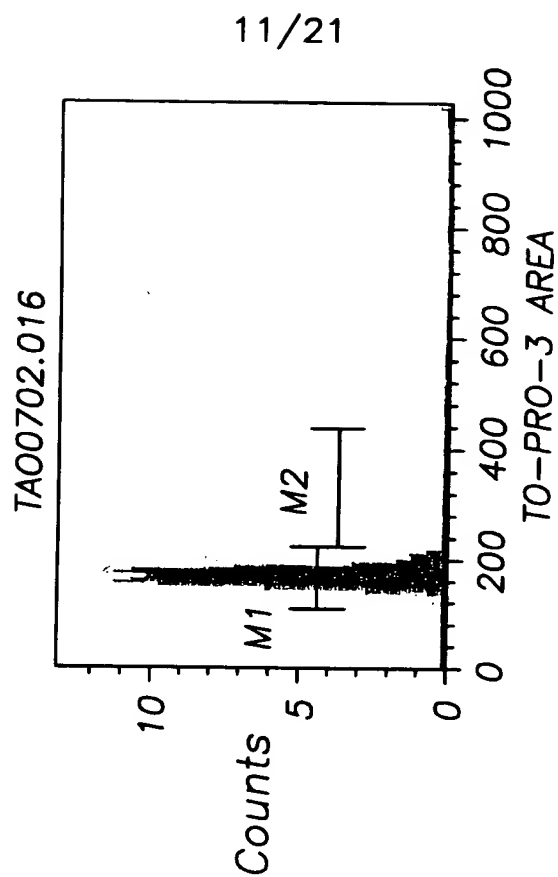
109140" 20900000

FIG. 7a-3

Sca-1+Lin-



Sca-1+Lin-



To-pro-3 staining →

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FIG.7b

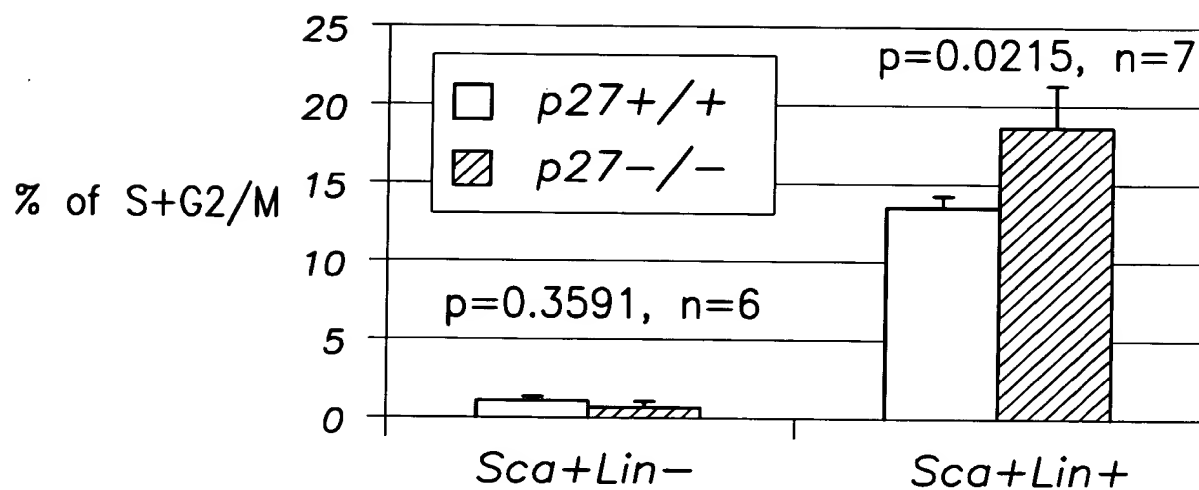


FIG.7c

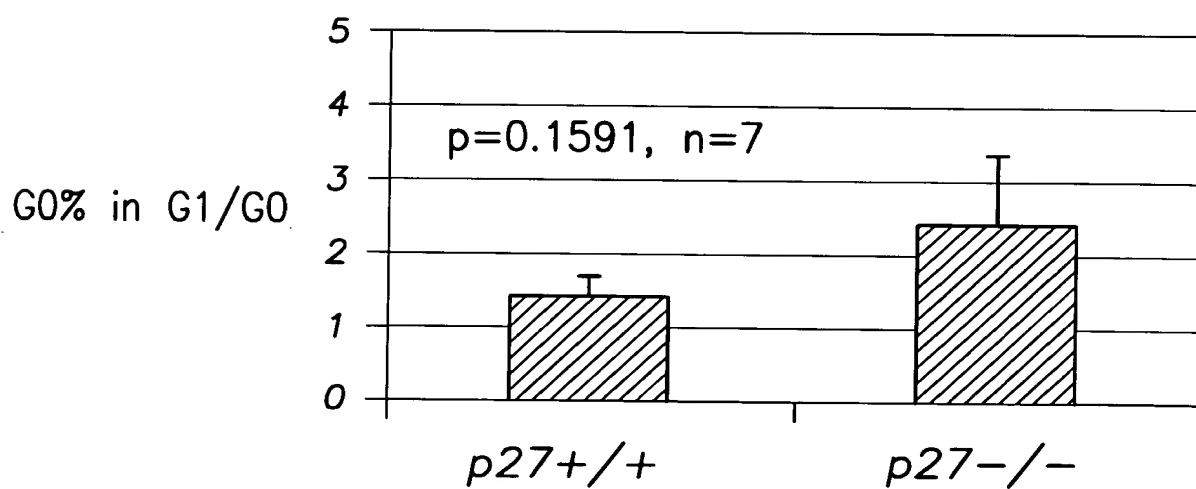


FIG.8

Reduction %

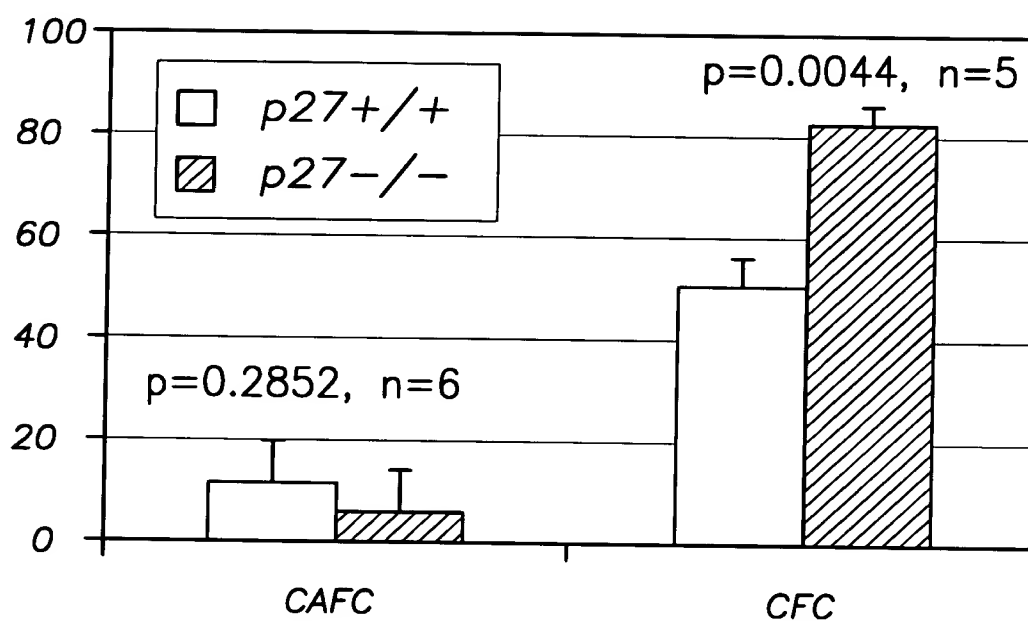


FIG.9a

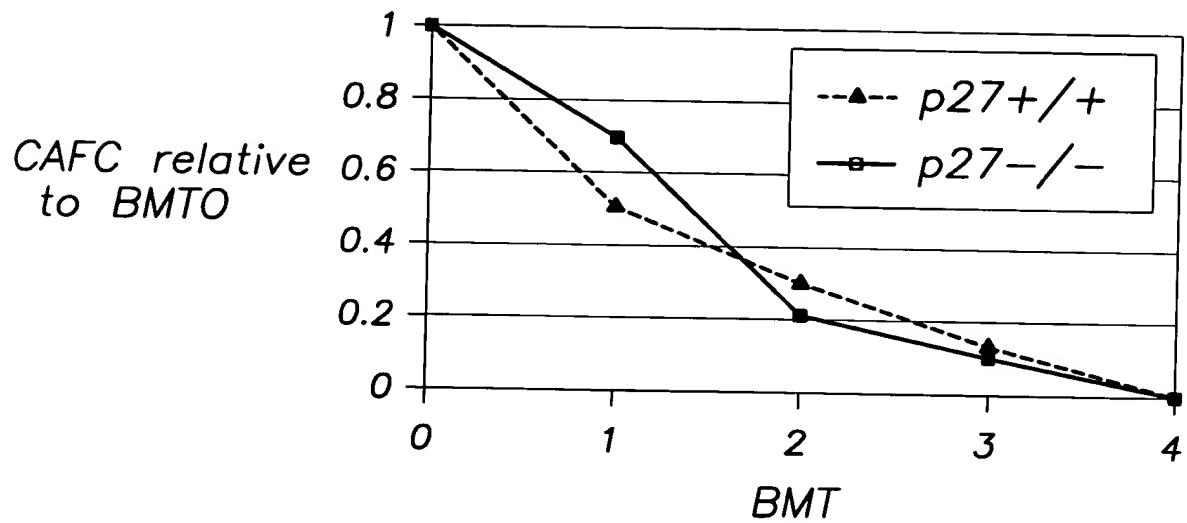
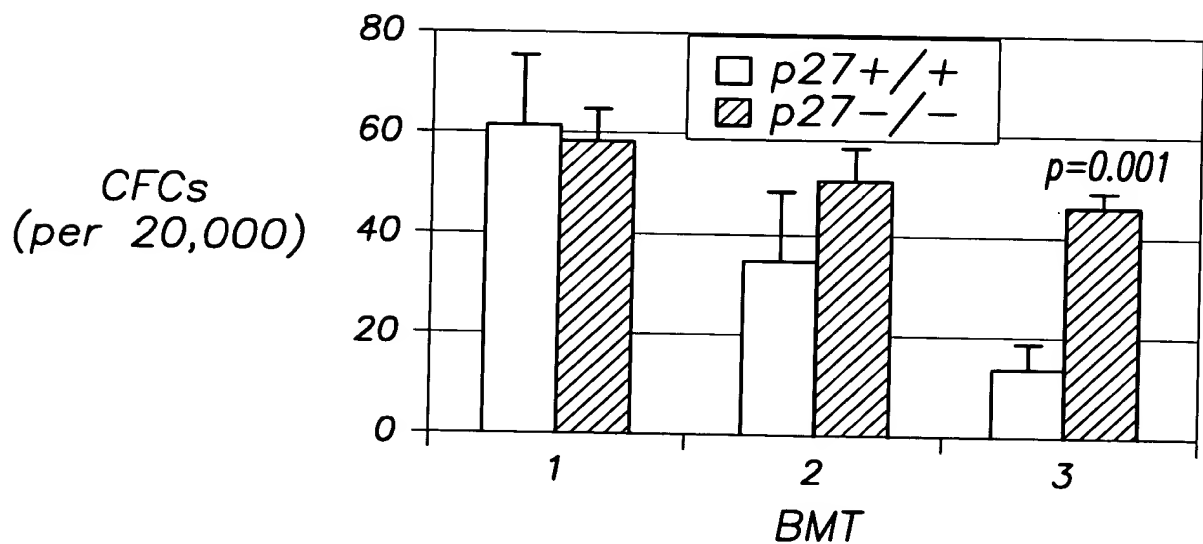


FIG.9b



Survival %

Days

$p=0.036$

$n=10$

$n=9$

Legend:

- $p27^{+/+}$ (dashed line with diamond markers)
- $p27^{-/-}$ (solid line with square markers)

| Days | $p27^{+/+}$ Survival % (n=10) | $p27^{-/-}$ Survival % (n=9) |
|------|-------------------------------|------------------------------|
| 0 | 100 | 100 |
| 2 | 90 | 100 |
| 4 | 90 | 90 |
| 6 | 80 | 90 |
| 8 | 80 | 80 |
| 10 | 70 | 70 |
| 12 | 70 | 60 |
| 14 | 60 | 60 |
| 16 | 60 | 50 |
| 18 | 50 | 50 |
| 20 | 50 | 40 |
| 22 | 40 | 40 |
| 24 | 40 | 30 |
| 26 | 30 | 30 |
| 28 | 30 | 20 |
| 30 | 30 | 20 |

133163 63553360

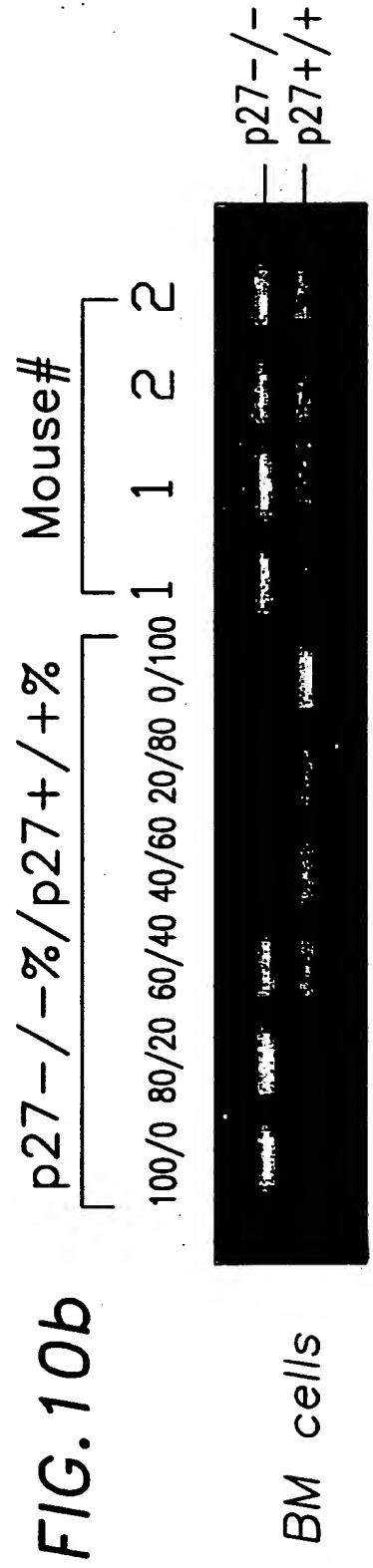
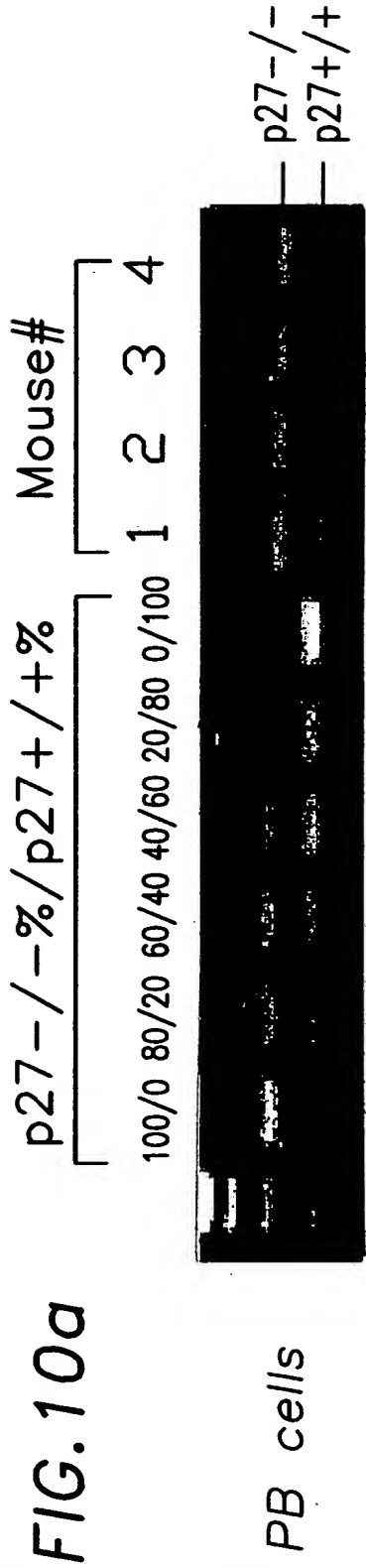


FIG. 10c

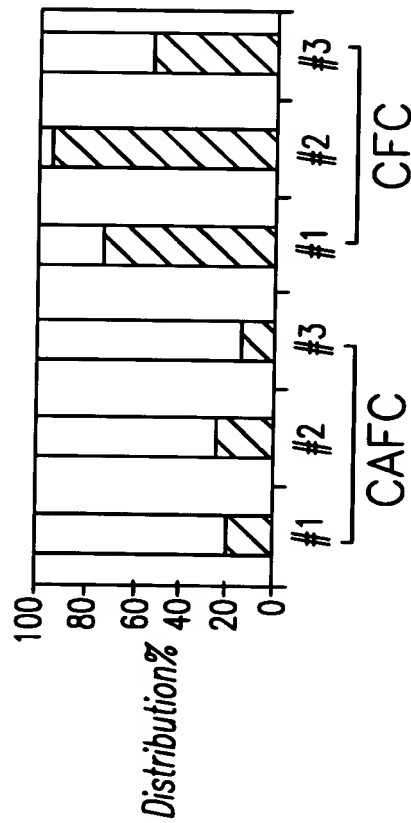


FIG. 10d

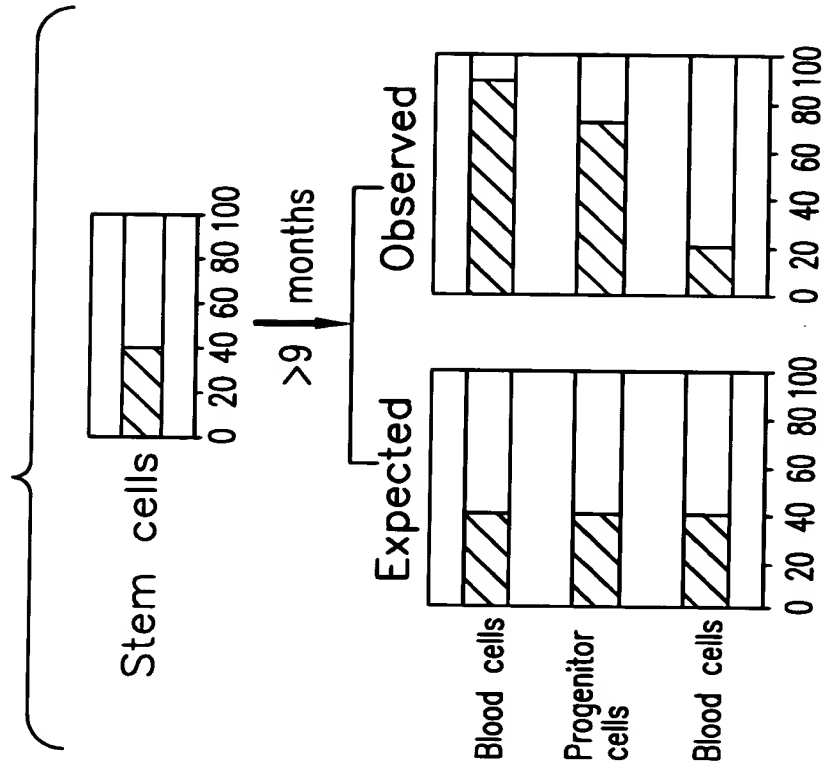


FIG. 11a

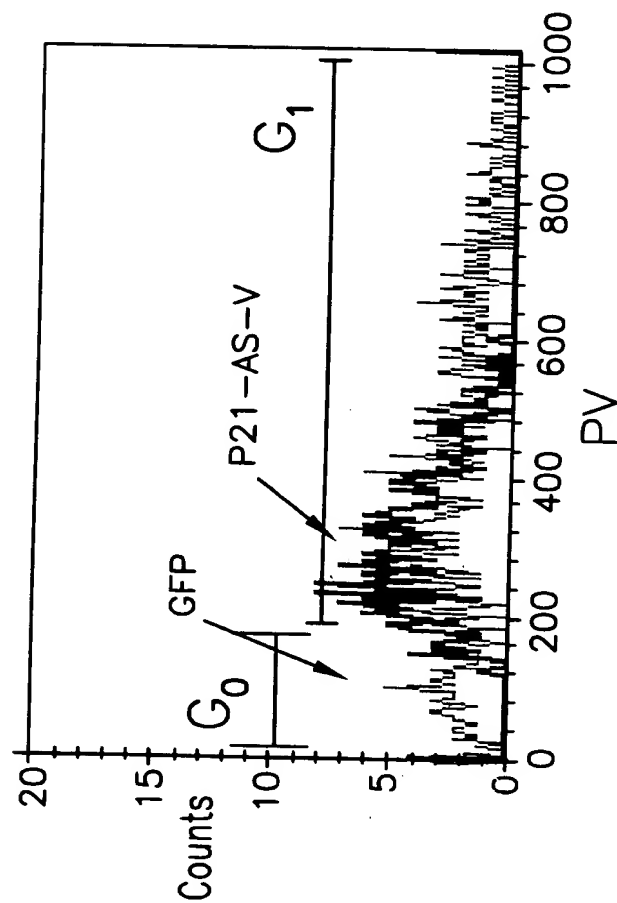


FIG. 11b

Percentage of G_0 cells in the CD34+38- subpopulation of transduced CD34+ cord blood cells

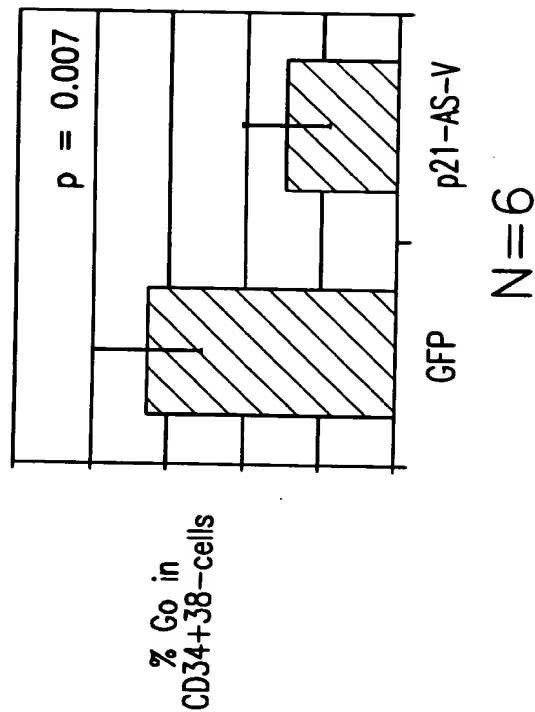


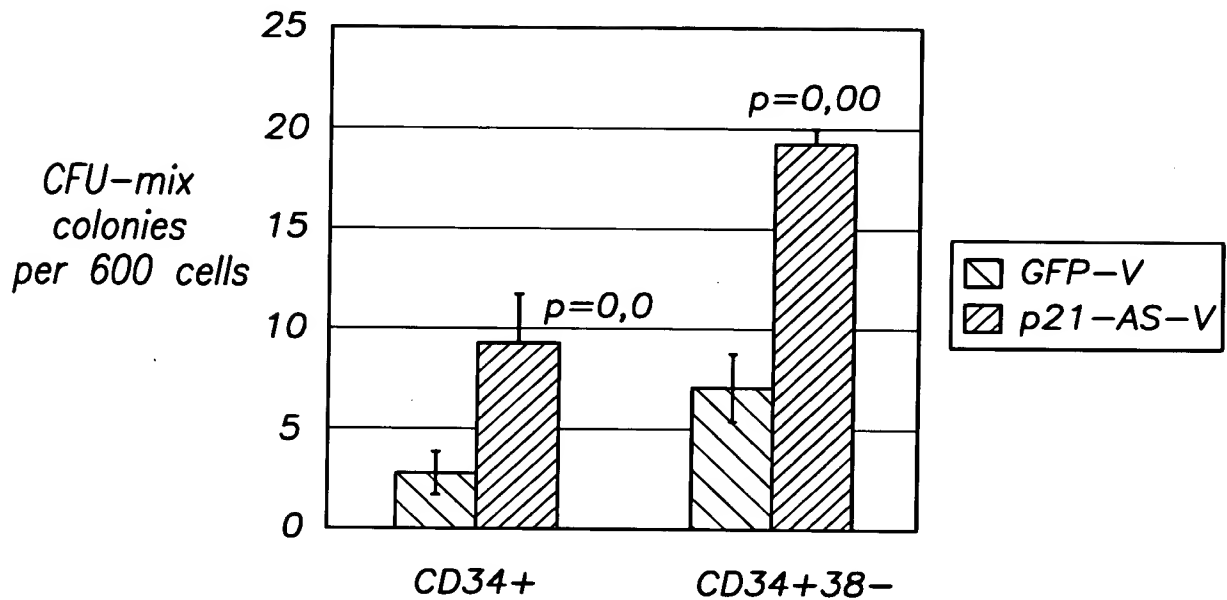
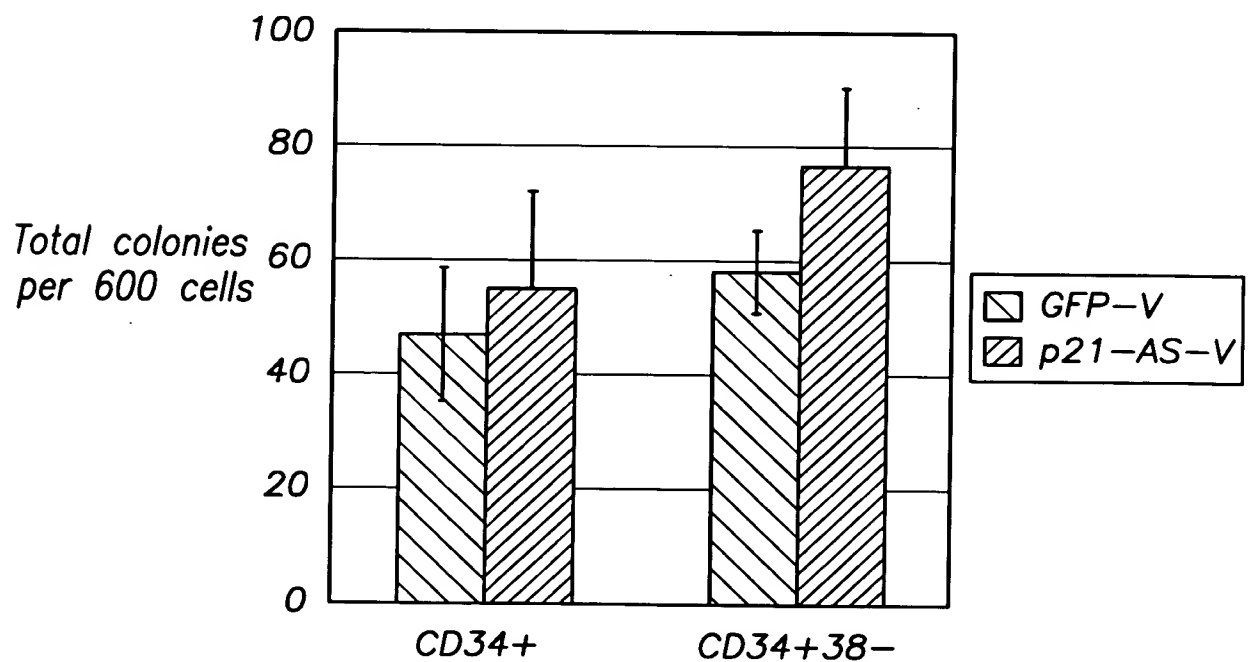
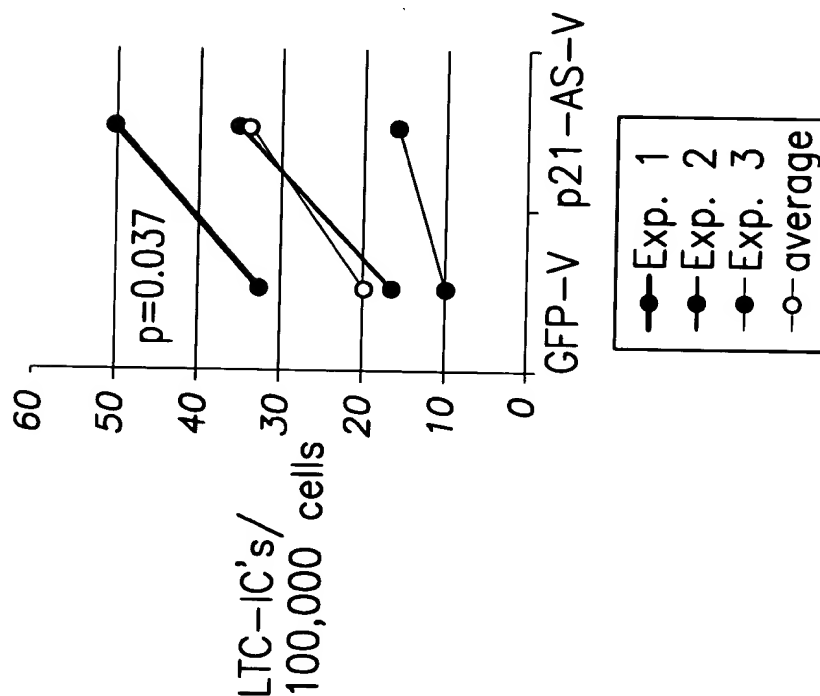
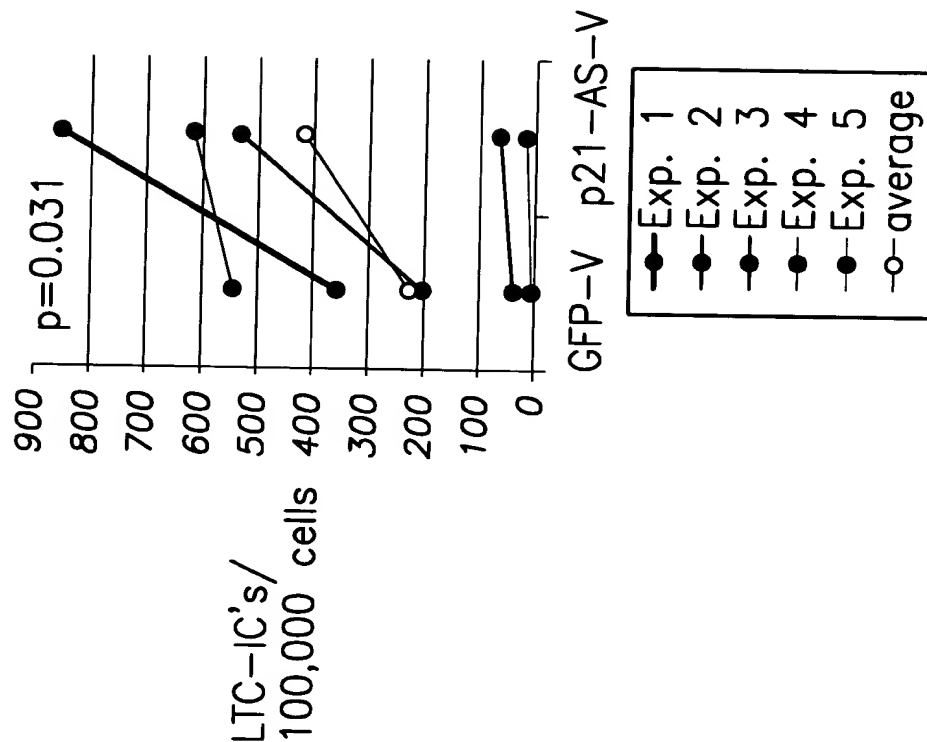
FIG. 12a*CFU-mix colonies of transduced progenitor cells***FIG. 12b***Total colony number of transduced progenitor cells*

FIG. 13

LTC-IC assay p21-AS
transduced CD34+ cells



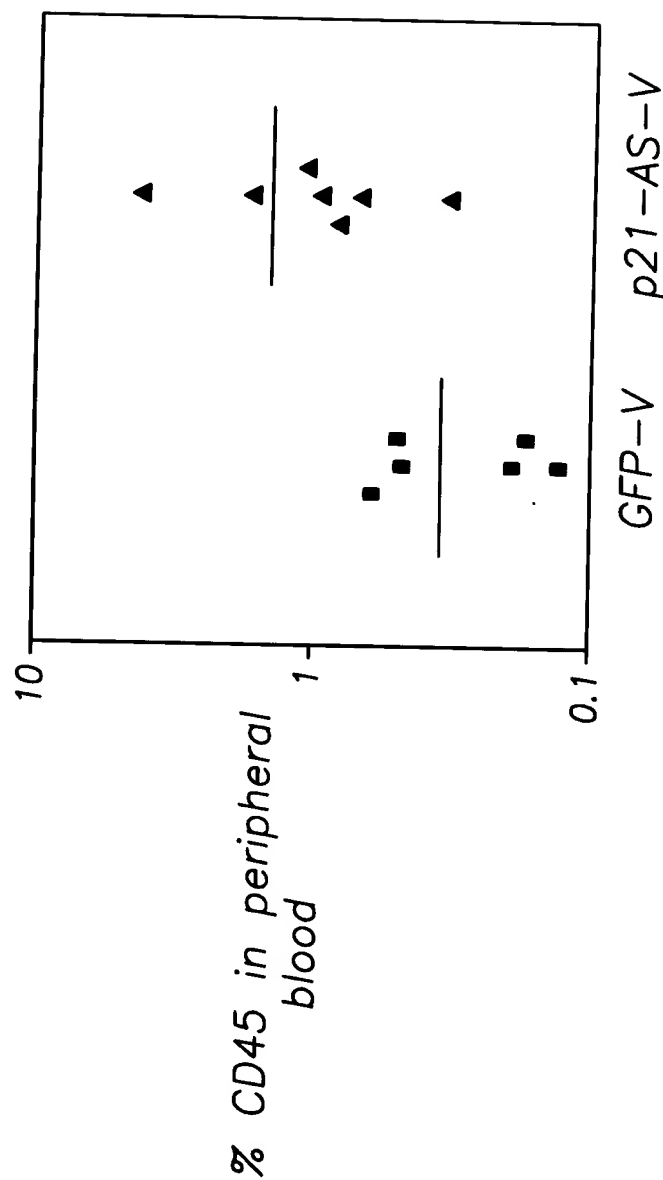
LTC-IC assay p21-AS
transduced CD34+38- cells



p21^{Cip1} anti-sense enhances human
CD34⁺ cell engraftment of NOD/SCID mice

FIG. 14

SRA4 p21 week4 pB



p21-AS-V vs. GFP-V
p=0.04 t-test
p=0.0041 Mann-Whitney